



## Utah Department of **NATURAL RESOURCES**

### FOR IMMEDIATE RELEASE

#### **Media Contacts**

Kim Wells

Utah Division of Water Resources

[kimwells@utah.gov](mailto:kimwells@utah.gov)

Ashley Sumner

Utah Department of Environmental Quality

[ssumner@utah.gov](mailto:ssumner@utah.gov)

### **Drought Update for the Week of July 19**

**Salt Lake City** (July 21, 2021) – Extreme drought conditions are negatively impacting reservoir levels, recreation and water quality. As Pioneer Day and the long holiday weekend approach, those venturing outdoors, particularly to lakes and reservoirs, are encouraged to check current conditions before hitting the road.

“The Pioneer Day weekend is traditionally one of Utah’s busiest outdoor recreation periods. With low reservoir levels, it’s essential for families heading to our lakes and reservoirs to take extra precautions before visiting and while playing,” said Utah Department of Natural Resources Executive Director Brian Steed. “Check for boat ramp closures and advisories, wear a life jacket and be aware of harmful algal bloom conditions.”

The following information from the week of July 19 is compiled by the Utah Divisions of [Water Resources](#) and [Water Rights](#) to provide context to Utah’s current [drought](#) conditions, water storage, stream flows and water rights allocation. The Department of Environmental Quality also contributed information about [harmful algal blooms](#) to this week’s report.

#### **At-a-glance changes for the week:**

- Decreasing reservoir levels are leading to more boat ramp closures. Seven boat ramps are currently closed at six state parks, including Willard Bay, Echo, Millsite, Yuba, Piute and Antelope Island. Caution advisories have been issued for six additional parks. Get up to date information before heading to the lake or reservoir [here](#).
- Lower water levels may also expose additional navigation hazards and decrease the amount of boatable water. Boat operators should keep their distance from other recreators and never operate above a wakeless speed within 150 feet of swimmers, docks and boats.
- More harmful algal blooms (HABs) are being reported this year due to low water levels and warmer than normal temperatures. A lake-wide Warning Advisory has been issued for Utah Lake by Utah County Health Department. Current state-wide HAB status can be found [here](#).



- Reservoir storage statewide continues to drop and now averages 56% (down from 58% last week). Twenty-eight of Utah's largest 42 reservoirs are below 55% of available capacity. Red Fleet, Smith & Morehouse and Bear Lake all dropped below 55%. Due to heavy rain, Lower Enterprise rebounded above 55%.
- Current statewide reservoir levels are now lower than they were at the end of last year's irrigation season in October (56% now compared to 61% in October 2020). There are about three months remaining in the irrigation season when water use is traditionally at its peak.
- On July 19, the elevation of the Great Salt Lake tied the previous historic low (4191.4 feet) recorded in 1963. (The Division of Water Resources uses the daily averages rather than the instantaneous readings recorded every 15-minutes.)
- Streamflows statewide remain low with 76 of the 97 measured streams flowing below normal. Daily flow from 28 headwater streams is currently flowing below the previous minimum daily flow record.

###

## **FULL REPORT: WEEK OF JULY 19**

### **Precipitation and soil moisture**

- Precipitation accumulation (as measured at NRCS SnoTel sites) for the state continues to be record low. To restore conditions to "average" for the year, Utah still needs about 14.5 inches of rain: 10 inches to cancel the deficit and 4.5 inches to account for the precipitation traditionally accumulated from late July through September.
- To get streams running at healthy levels while filling reservoirs, Utah needs late summer and early fall storms to return soil moisture levels to normal, which will help snowpack runoff make it to streams and reservoirs rather than get absorbed by dry soils. The state also needs an above-average snowpack to refill reservoirs.
- Air temperatures for the week were 3.2 degrees Fahrenheit above average.
- Overall (mountain and valley locations), the state has seen 56% of the precipitation typically received in a normal water year (Oct. 1 through Sept. 30).
- Soil moisture has remained steady during the last week, currently about 4% drier than average.

### **Streamflows**

Streams statewide continue to flow at less than 50% of normal.

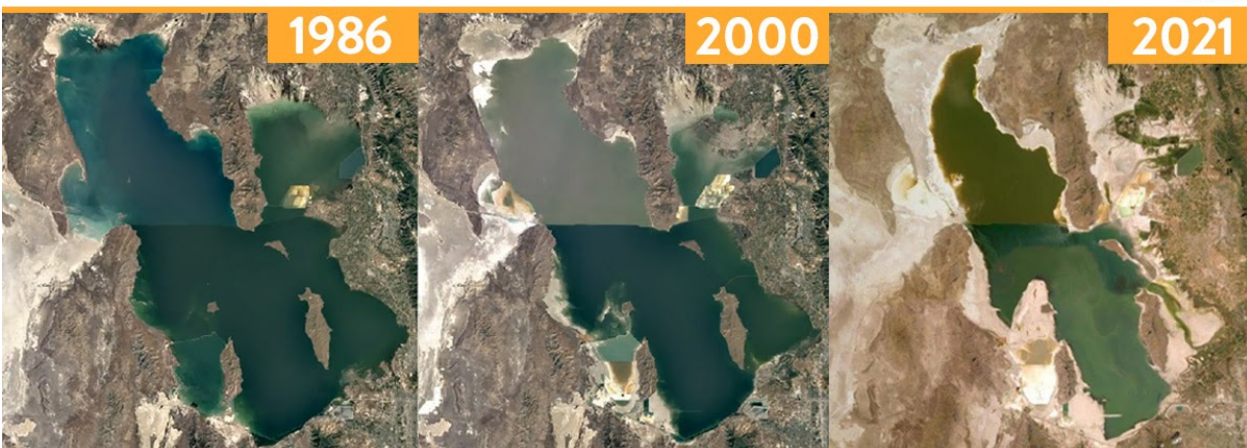
- Seventy-six (77 reported last week) of Utah's 97 streams reporting data are flowing below normal. This is approximately the same as the previous week.
- Fifteen streams are flowing at their lowest levels ever recorded. This is approximately the same as last week.
- Daily flow from 28 headwater streams is currently flowing below the previous minimum daily flow record.

## **Reservoir and Lake Levels**

About 95% of Utah's water comes from snowpack. This statewide average ranges from around 75% in the southwest corner to over 95% in the northern part near the Weber Basin headwaters. Different-sized reservoirs are located throughout the state to catch and store runoff. Small reservoirs store about one year's worth of water, while larger reservoirs, like Strawberry or Jordanelle, store several year's worth. Reservoir storage helps to prevent water shortages and is dependent on snowpack and runoff.

- The capacity of major reservoirs statewide dropped another 2% this week compared to last week. Current storage level is 56%.
- Twenty-eight of Utah's largest 42 reservoirs remain below 55% of available capacity. Red Fleet, Smith & Morehouse, and Bear Lake all dropped below 55%. Due to heavy rain, Lower Enterprise rebounded above 55%.
- The Great Salt Lake's current elevation has dropped to 4,191.4 feet, tying the historic recorded low level (4191.4 feet) documented in 1963. Ongoing modeling indicates the lake will surpass its historic low this month.

## **GREAT SALT LAKE ELEVATION**



**RECORD HIGH**  
**4211.65 FEET**

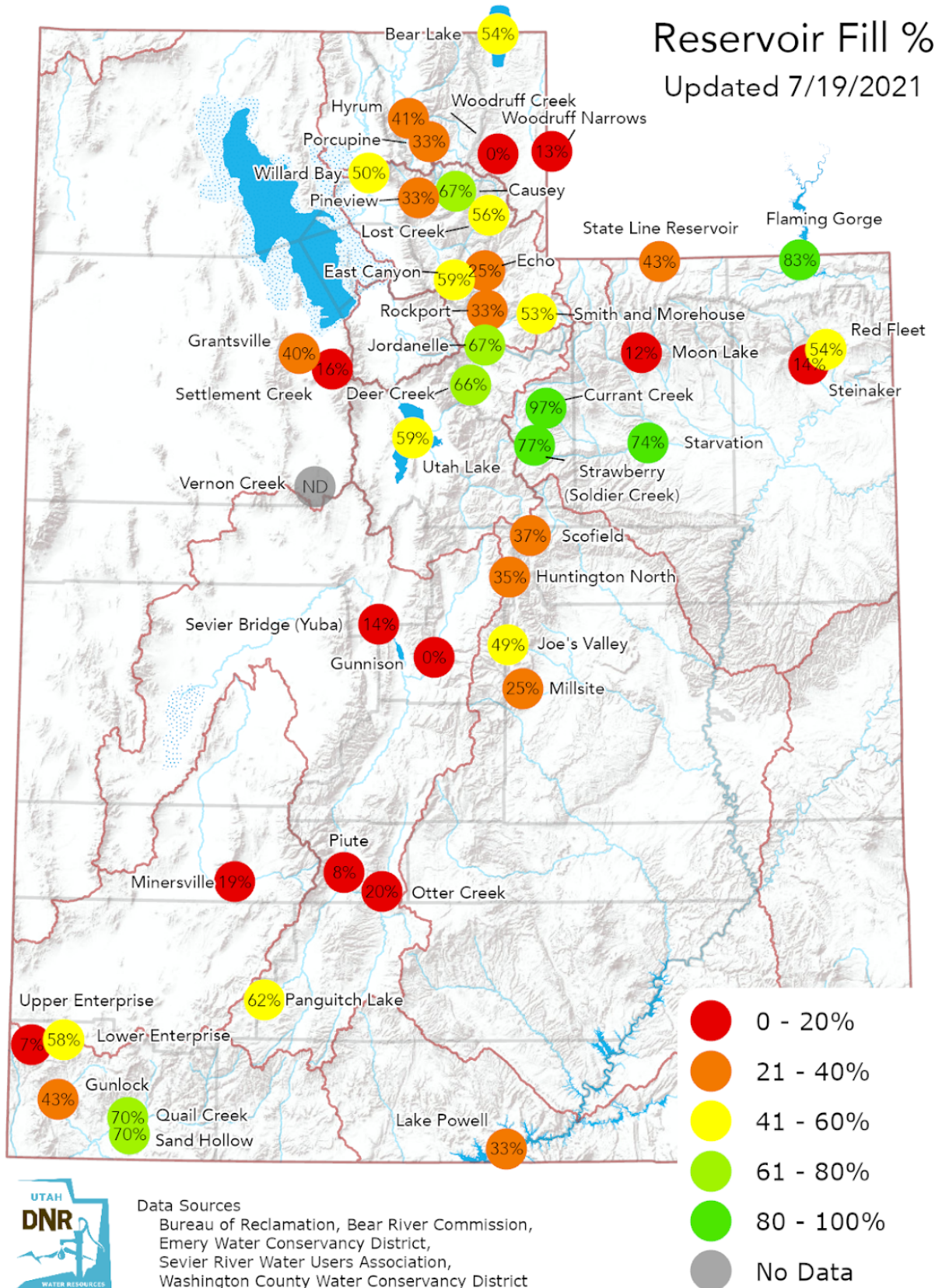
**AVERAGE**  
**4202.2 FEET**

**CURRENT**  
**4191.4 FEET**



# Reservoir Fill %

Updated 7/19/2021



### **Drought Effects on Priority Distribution of Water Rights in Utah (updated July 19)**

While statewide there are many different river systems, the information below highlights water rights priorities, natural flow and direct flow on just four of them. CFS below stands for cubic feet per second.

**Middle Bear River** – Priorities: Direct Flow (1860 - 1909), Storage (1911), High Rights (1914 - 1989)

<i>Date</i>	<i>Priority from River</i>	<i>Natural Flow</i>	<i>% Direct Flow Rights</i>
July 19, 2019	1918	1,630 cfs	117%
July 19, 2020	1901	883 cfs	63%
July 19, 2021	1889	235 cfs	17%

- The water supply on the Logan River, tributary to the Middle Bear, is third lowest on record out of 58 years (1977 and 1992 were lower) according to the CRBFC Water Supply Forecast (Station LGNU1).
- Currently, only 17% of the direct flow water rights are being met with earliest priority rights being fulfilled from 1860 to 1889.

**Upper Provo River** – Priorities: Direct Flow (1<sup>st</sup> Class - 17<sup>th</sup> Class), Storage

<i>Date</i>	<i>Priority from River</i>	<i>Natural Flow</i>	<i>% Direct Flow Rights</i>
July 20, 2019	5th Class	184 cfs	41%
July 20, 2020	50% 1 <sup>st</sup> Class	76 cfs	17%
July 20, 2021	30% 1 <sup>st</sup> Class	46 cfs	10%

- The water supply on the Provo River at Hailstone is the third lowest on record out of 67 years (1977 and 1961 were lower) according to the CRBFC Water Supply Forecast (Station PVHU1).
- Currently, only 10% of the direct flow water rights are being met, consisting of only 30% of 1st Class rights.

**Upper Duchesne River** – Priorities: Direct Flow (1900 - 1964), Storage (1964)

<i>Date</i>	<i>Priority from River</i>	<i>Natural Flow</i>	<i>% Direct Flow Rights</i>
July 19, 2019	Storage	1,029 cfs	93%
July 19, 2020	1918	288 cfs	26%
July 19, 2021	1910	146 cfs	13%

- The water supply on the Duchesne River at Randlett is the second lowest on record out of 79 years (1977 was lower) according to the CRBFC Water Supply Forecast (Station DURU1).
- Currently, only 13% of the direct flow water rights are being met with the earliest priority rights being fulfilled from 1900-1910.

**Upper Sevier River** – Priorities: Direct Flow (1<sup>st</sup> Class – 3<sup>rd</sup> Class), Storage

<i>Date</i>	<i>Priority from River</i>	<i>Natural Flow</i>	<i>% Direct Flow Rights</i>
July 19, 2019	100% 1 <sup>st</sup> Class	297 cfs	73%
July 19, 2020	26% 1 <sup>st</sup> Class	78 cfs	19%
July 19, 2021	31% 1 <sup>st</sup> Class	93 cfs	23%

- The water supply on the Sevier River at Piute is the 3rd lowest on record out of 103 years (1957 and 1934 were lower) according to the CRBFC Water Supply Forecast (Station PIUU1).
- Currently, only 23% of the direct flow water rights are being met, consisting of only 31% of 1st Class rights.

### **Well Replacements**

In addition to surface water rights, the state engineer oversees the appropriation of groundwater and construction of groundwater wells. As groundwater conditions change, well owners may need to replace their well. This may be due to issues of the existing well, or the need to drill deeper. When this happens a water user files either a replacement, or renovate application. In some cases, a change application may need to be filed. This is dependent on the individual status of the user's water right.

- Three new replacement well applications were filed in the last week. The total number of replacement and deepening requests this year is 84 statewide.
- As a comparison, there were 113 in 2020 and 102 in 2019. The average annual count during the past five years is 107.